

Data Definitions

Workforce Explorer

Physician Specialties

The source of the physician data is the AMA Masterfile. According to the AMA:

“Established by the American Medical Association (AMA) in 1906, the AMA Physician Masterfile was initially developed as a record keeping device supporting membership and mailing activities. Since then, the AMA Physician Masterfile has expanded to include significant education, training and professional certification information on virtually all Doctors of Medicine (MD) and Doctors of Osteopathic Medicine (DO) in the United States, Puerto Rico, Virgin Islands and certain Pacific Islands. The AMA Physician Masterfile includes current and historical data for more than 1.4 million physicians, residents and medical students in the United States. This figure includes approximately 449,000 graduates of foreign medical schools who reside in the United States and who have met the educational and credentialing requirements necessary for recognition. A record is established when individuals enter medical schools accredited by the Liaison Committee on Medical Education (LCME), or in the case of international medical graduates (IMGs), upon entry into a post-graduate residency training program accredited by the Accreditation Council for Graduate Medical Education (ACGME)... Masterfile records are never removed even in the case of a physician's death.”¹

The AMA is constantly working to update their data in the Masterfile through physician surveys and the collection of missing values through a variety of other sources.

HealthLandscape completed the data processing for AMA Masterfile data, and the AMA Health Workforce Mapper currently uses Masterfile data accessed in July 2018. Data processing involved geocoding providers' best available practice address by matching these addresses with a privately maintained and licensed address database. Once longitude and latitude location attributes were applied to the address data, they were joined to U.S. Census geography files for geographic boundary identifiers.

The specialties included are:

Taxonomy Code	Physician Specialty
Allergy and Immunology	
A	Allergy
AI	Allergy & Immunology
ALI	Clinical Laboratory Immunology (ALI)
IG	Immunology

¹ <https://www.ama-assn.org/life-career/ama-physician-masterfile>

Taxonomy Code	Physician Specialty
Anesthesiology	
ACA	Adult Cardiothoracic Anesthesiology
AN	Anesthesiology
CCA	Critical Care Medicine (CCA)
HPA	Hospice & Palliative Medicine (HPA)
HPR	Hospice & Palliative Medicine (HPR)
OAN	Obstetric Anesthesiology
PME	Pain Management
RAA	Regional Anesthesiology and Acute Pain Medicine
SMA	Sleep Medicine (SMA)
Cardiology	
CD	Cardiovascular Diseases
IC	Interventional Cardiology
ICE	Cardiac Electrophysiology
NC	Nuclear Cardiology
PDC	Pediatric Cardiology
Dermatology	
D	Dermatology
DDL	Clinical & Laboratory Dermatological Immunology
DMP	Dermatopathology
PDD	Pediatric Dermatology
PRD	Procedural Dermatology
Emergency Medicine	
ACC	Anesthesiology Critical Care Medicine
CCE	Critical Care Medicine (CCE)
EM	Emergency Medicine
EMS	Emergency Medical Services
ESM	Sports Medicine (ESM)
ETX	Medical Toxicology (ETX)
HPE	Hospice & Palliative Medicine (HPE)
PE	Pediatric Emergency Medicine
UCM	Urgent Care Medicine
UME	Undersea & Hyperbaric Medicine
Endocrinology/Diabetes/Metabolism	
DIA	Diabetes
END	Endocrinology, Diabetes, & Metabolism
Family/General Practice	
AMF	Adolescent Medicine (AMF)
FM	Family Medicine (FM)
FP	Family Medicine (FP)
FSM	Sports Medicine (FSM)
GP	General Practice
HPF	Hospice & Palliative Medicine (HPF)

Taxonomy Code	Physician Specialty
Geriatrics	
FPG	Geriatric Medicine (FPG)
IMG	Geriatric Medicine (IMG)
PYG	Geriatric Psychiatry
Internal Medicine	
AHF	Advanced Heart Failure and Transplant Cardiology
AMI	Adolescent Medicine (AMI)
CCM	Critical Care Medicine (CCM)
CHD	Adult Congenital Heart Disease
CLI	Clinical Informatics (CLI)
GE	Gastroenterology
HEM	Hematology
HEP	Hepatology
HPI	Hospice & Palliative Medicine (HPI)
ID	Infectious Disease
ILI	Clinical & Laboratory Immunology (ILI)
IM	Internal Medicine
ISM	Sports Medicine (ISM)
NEP	Nephrology
NTR	Nutrition
PCC	Pulmonary Critical Care Medicine
PUD	Pulmonary Disease
RHU	Rheumatology
SMI	Sleep Medicine (SMI)
THP	Transplant Hepatology
VM	Vascular Medicine
Medical Genetics	
CBG	Clinical Biochemical Genetics
CCG	Clinical Cytogenetics
CG	Clinical Genetics
CMG	Clinical Molecular Genetics
MBG	Medical Biochemical Genetics
MG	Medical Genetics
MGG	Molecular Genetic Pathology (Medical Genetics)
Neurological Surgery	
ES	Endovascular Surgical Neuroradiology (ES)
ESN	Endovascular Surgical Neuroradiology (ESN)
NS	Neurological Surgery
NSP	Pediatric Surgery

Taxonomy Code	Physician Specialty
Neurology	
BIN	Brain Injury Medicine (BIN)
CHN	Child Neurology
CN	Clinical Neurophysiology
ENR	Endovascular Surgical Neuroradiology (ENR)
EPL	Epilepsy
HPN	Hospice & Palliative Medicine (HPN)
N	Neurology
NDN	Neurodevelopmental Disabilities
NMN	Neuromuscular Medicine (NMN)
SMN	Sleep Medicine (SMN)
VN	Vascular Neurology
Obstetrics/Gynecology	
FPR	Female Pelvic Medicine and Reconstructive Surgery
GYN	Gynecology
HPO	Hospice & Palliative Medicine (HPO)
MFM	Maternal & Fetal Medicine
OBG	Obstetrics & Gynecology
OBS	Obstetrics
OCC	Critical Care Medicine (OCC)
REN	Reproductive Endocrinology and Infertility
Oncology	
GO	Gynecological Oncology
HO	Hematology/Oncology
OMO	Musculoskeletal Oncology
ON	Medical Oncology
PHO	Pediatric Hematology/Oncology
SO	Surgical Oncology
Ophthalmology	
OPH	Ophthalmology
OPR	Ophthalmic Plastic and Reconstructive Surgery
PO	Pediatric Ophthalmology
Orthopedics	
HSO	Hand Surgery (HSO)
OAR	Adult Reconstructive Orthopedics
OFA	Foot & Ankle Orthopedics
OP	Pediatric Orthopedics
ORS	Orthopedic Surgery
OSM	Sports Medicine (OSM)
OSS	Orthopedic Surgery of the Spine
OTR	Orthopedic Trauma

Taxonomy Code	Physician Specialty
Otolaryngology	
NO	Neurotology (Otolaryngology)
OTO	Otolaryngology
PDO	Pediatric Otolaryngology
PSH	Plastic Surgery within the Head & Neck (PSH)
PSO	Plastic Surgery within the Head & Neck (PSO)
SMO	Sleep Medicine (SMO)
Pathology	
ATP	Anatomic Pathology
BBK	Blood Banking/Transfusion Medicine
CIP	Clinical Informatics (CIP)
CLP	Clinical Pathology
DMP	Dermatopathology
FOP	Forensic Pathology
HMP	Hematology
MGP	Molecular Genetic Pathology
MM	Medical Microbiology
NP	Neuropathology
PCH	Chemical Pathology
PCP	Cytopathology
PP	Pediatric Pathology
PTH	Anatomic/Clinical Pathology
SP	Selective Pathology
Pediatrics	
ADL	Adolescent Medicine (ADL)
CAP	Child Abuse Pediatrics
CCP	Pediatric Critical Care Medicine
CID	Clinical Informatics (CID)
CPP	Pediatrics/Psychiatry/Child and Adolescent Psychiatry
DBP	Developmental-Behavioral Pediatrics
HPP	Hospice & Palliative Medicine (HPP)
NDP	Neurodevelopmental Disabilities
NPM	Neonatal-Perinatal Medicine
PAN	Pediatric Anesthesiology
PD	Pediatrics
PDA	Pediatric Allergy
PDE	Pediatric Endocrinology
PDI	Pediatric Infectious Diseases
PDP	Pediatric Pulmonology
PDT	Medical Toxicology (PDT)
PEM	Pediatric Emergency Medicine
PG	Pediatric Gastroenterology

Taxonomy Code	Physician Specialty
PLI	Clinical & Laboratory Immunology (PLI)
PN	Pediatric Nephrology
PPR	Pediatric Rheumatology
PSM	Sports Medicine (PSM)
PTP	Pediatric Transplant Hepatology
SMP	Sleep Medicine (SMP)
Physical Medicine & Rehab	
BIP	Brain Injury Medicine (BIP)
HPM	Hospice & Palliative Medicine (HPM)
HPR	Hospice & Palliative Medicine (HPR)
NMP	Neuromuscular Medicine (NMP)
PM	Physical Medicine & Rehabilitation
PRS	Sports Medicine (PRS)
RPM	Pediatric Rehabilitation Medicine
SCI	Spinal Cord Injury
Plastic Surgery	
CFS	Craniofacial Surgery
FPS	Facial Plastic Surgery
HSP	Hand Surgery (HSP)
PS	Plastic Surgery
PSI	Plastic Surgery – Integrated
PSP	Plastic Surgery within the Head & Neck (PSP)
Preventive Medicine	
AM	Aerospace Medicine
CIM	Clinical Informatics (CIM)
GPM	General Preventive Medicine
OM	Occupational Medicine
PHP	Public Health & General Preventive Medicine
PTX	Medical Toxicology (PTX)
UM	Undersea & Hyperbaric Medicine
Psychiatry	
ADP	Addiction Psychiatry
BIN	Brain Injury Medicine (BIN)
CHP	Child and Adolescent Psychiatry
HPN	Hospice & Palliative Medicine (HPN)
NUP	Neuropsychiatry
P	Psychiatry
PFP	Forensic Psychiatry
PPN	Pain Medicine (PPN)
PYA	Psychoanalysis
PYM	Psychosomatic Medicine
SMN	Sleep Medicine (SMN)

Taxonomy Code	Physician Specialty
Radiology	
AR	Abdominal Radiology
CTR	Cardiothoracic Radiology
DR	Diagnostic Radiology
HPD	Hospice & Palliative Medicine (HPD)
MDP	Medical Physics
MSR	Musculoskeletal Radiology
NR	Nuclear Radiology
PDR	Pediatric Radiology
R	Radiology
RNR	Neuroradiology
RO	Radiation Oncology
RP	Radiological Physics
VIR	Vascular & Interventional Radiology
Surgery	
AS	Abdominal Surgery
ASO	Advanced Surgical Oncology
CCS	Surgical Critical Care
CHS	Congenital Cardiac Surgery
CRS	Colon & Rectal Surgery
CS	Cosmetic Surgery
DS	Dermatologic Surgery
GS	General Surgery
HNS	Head & Neck Surgery
HPS	Hospice & Palliative Medicine (HPS)
HS	Hand Surgery (HS)
HSS	Hand Surgery (HSS)
OMF	Oral & Maxillofacial Surgery
PCS	Pediatric Cardiothoracic Surgery
PDS	Pediatric Surgery
PRO	Proctology
TRS	Trauma Surgery
TS	Thoracic Surgery
TSI	Thoracic Surgery - Integrated
TTS	Transplant Surgery
VS	Vascular Surgery
VSI	Vascular Surgery - Integrated
Urology	
U	Urology
UP	Pediatric Urology
UPR	Female Pelvic Medicine and Reconstructive Surgery

Taxonomy Code	Physician Specialty
Other	
ADM	Addiction Medicine
APM	Pain Medicine (APM)
EP	Epidemiology
HOS	Hospitalist
LM	Legal Medicine
MDM	Medical Management
NM	Nuclear Medicine
OMM	Osteopathic Manipulative Medicine
ONM	Osteopathic Neuromusculoskeletal Medicine
OS	Other Specialty
PMM	Pain Medicine (PMM)
PA	Clinical Pharmacology
PHL	Phlebology
PHM	Pharmaceutical Medicine
PLM	Palliative Medicine
PMN	Pain Medicine (PMN)
PMP	Pain Medicine (PMP)
SME	Sleep Medicine (SME)
US	Unspecified
Combined Residency Training Specialties	
CPP	Pediatrics/Psychiatry/Child and Adolescent Psychiatry
DNN	Diagnostic Radiology/Nuclear Medicine
EFM	Emergency Medicine/Family Medicine
EMP	Pediatrics/Emergency Medicine
FMP	Family Medicine/Preventive Medicine
FPP	Psychiatry/Family Medicine
IEC	Internal Medicine/Emergency Medicine/Critical Care Medicine
IFP	Internal Medicine/Family Medicine
IMA	Internal Medicine/Anesthesiology
IMD	Internal Medicine/Dermatology
INM	Internal Medicine/Nuclear Medicine
IPM	Internal Medicine/Preventive Medicine
MDG	Internal Medicine/Medical Genetics
MEM	Internal Medicine/Emergency Medicine
MN	Internal Medicine/Neurology
MP	Internal Medicine/Psychiatry
MPD	Internal Medicine/Pediatrics
MPM	Internal Medicine/Physical Medicine and Rehabilitation
NNM	Neurology/Nuclear Medicine
NPR	Neurology/Physical Medicine and Rehabilitation
NRN	Neurology/Diagnostic Radiology/Neuroradiology

Taxonomy Code	Physician Specialty
PDM	Pediatrics/Dermatology
PDN	Pediatrics/Anesthesiology
PMG	Pediatrics/Medical Genetics
PPM	Pediatrics/Physical Medicine and Rehabilitation
PYN	Psychiatry/Neurology

Non-Physician Specialties

The source for non-physician provider data is the Centers for Medicare and Medicaid Services’ (CMS) National Plan and Provider Enumeration System (NPPES). The CMS NPPES assigns a National Provider Identifier Standard (NPI) number to healthcare providers for identification in HIPAA-compliant administrative and financial transactions. When applying for an NPI number, providers select a Health Care Provider Taxonomy code that best describes their specialization. NPPES data are updated monthly, but individual records are only updated when a provider logs onto the system and makes changes.

HealthLandscape completed the data processing for the CMS NPPES data and the AMA Health Workforce Explorer currently uses NPPES data accessed in May 2018. Data processing involved geocoding providers’ best available practice address by matching these addresses with a privately maintained and licensed address database. Once longitude and latitude location attributes were applied to the address data, they were joined to U.S. Census geography files for geographic boundary identifiers.

Taxonomy Code	Non-Physician Specialty
APRN, Certified Clinical Nurse Specialist	
364S00000X	Clinical Nurse Specialist, General
364SA2100X	Acute Care
364SA2200X	Adult Health
364SC0200X	Critical Care Medicine
364SC1501X	Community Health/Public Health
364SC2300X	Chronic Care
364SE0003X	Emergency
364SE1400X	Ethics
364SF0001X	Family Health
364SG0600X	Gerontology
364SH0200X	Home Health
364SH1100X	Holistic
364SI0800X	Informatics
364SL0600X	Long-term Care
364SM0705X	Medical-Surgical
364SN0000X	Neonatal
364SN0800X	Neuroscience
364SP0200X	Pediatrics
364SP0807X	Psychiatric/Mental Health, Child & Adolescent
364SP0808X	Psychiatric/Mental Health
364SP0809X	Psychiatric/Mental Health, Adult
364SP0810X	Psychiatric/Mental Health, Child & Family
364SP0811X	Psychiatric/Mental Health, Chronically Ill
364SP0812X	Psychiatric/Mental Health, Community
364SP0813X	Psychiatric/Mental Health, Geropsychiatric
364SP1700X	Perinatal
364SP2800X	Perioperative

Taxonomy Code	Non-Physician Specialty
364SR0400X	Rehabilitation
364SS0200X	School
364ST0500X	Transplantation
364SW0102X	Women's Health
364SX0106X	Occupational Health
364SX0200X	Oncology
364SX0204X	Oncology, Pediatrics
APRN, Certified Nurse Practitioner	
363L00000X	Nurse Practitioner, General
363LA2100X	Acute Care
363LA2200X	Adult Health
363LC0200X	Critical Care Medicine
363LC1500X	Community Health
363LF0000X	Family
363LG0600X	Gerontology
363LN0000X	Neonatal
363LN0005X	Neonatal, Critical Care
363LP0200X	Pediatrics
363LP0222X	Pediatrics, Critical Care
363LP0808X	Psychiatric/Mental Health
363LP1700X	Perinatal
363LP2300X	Primary Care
363LS0200X	School
363LW0102X	Women's Health
363LX0001X	Obstetrics & Gynecology
363LX0106X	Occupational Health
Audiologist	
231H00000X	Audiologist, General
231HA2400X	Audiologist, Assistive Technology Practitioner
Certified Registered Nurse Anesthetist (CRNA)	
367500000X	Certified Registered Nurse Anesthetist (CRNA)
Chiropractic	
111N00000X	Chiropractor
111NI0013X	Independent Medical Examiner
111NI0900X	Internist
111NN0400X	Neurology
111NN1001X	Nutrition
111NP0017X	Pediatric Chiropractor
111NR0200X	Radiology
111NR0400X	Rehabilitation
111NS0005X	Sports Physician
111NT0100X	Thermography

Taxonomy Code	Non-Physician Specialty
111NX0100X	Occupational Medicine
111NX0800X	Orthopedic
Individual Certified Prosthetist-Orthotist	
222Z00000X	Orthotist
224P00000X	Prosthetist
Midwives	
367A00000X	Certified Nurse Midwife (CNM)
175M00000X	Midwife, Lay
176B00000X	Midwife
Occupational Therapist in Private Practice	
225X00000X	Occupational Therapist
225XE0001X	Environmental Modification
225XE1200X	Ergonomics
225XF0002X	Feeding, Eating &Swallowing
225XG0600X	Gerontology
225XH1200X	Hand
225XH1300X	Human Factors
225XL0004X	Low Vision
225XM0800X	Mental Health
225XN1300X	Neurorehabilitation
225XP0019X	Physical Rehabilitation
225XP0200X	Pediatrics
225XR0403X	Driving and Community Mobility
Optometry	
152W00000X	Optometrist
152WC0802X	Corneal and Contact Management
152WL0500X	Low Vision Rehabilitation
152WP0200X	Pediatrics
152WS0006X	Sports Vision
152WV0400X	Vision Therapy
152WX0102X	Occupational Vision
156FX1800X	Technician
Other Service Providers	
171000000X	Military Health Care Provider
171100000X	Acupuncturist
172V00000X	Community Health Worker
174H00000X	Health Educator
174N00000X	Lactation Consultant, Non-RN
175F00000X	Naturopath
175L00000X	Homeopath

Taxonomy Code	Non-Physician Specialty
Physical Therapist in Private Practice	
225100000X	Physical Therapist
2251C2600X	Cardiopulmonary
2251E1200X	Ergonomics
2251E1300X	Electrophysiology, Clinical
2251G0304X	Geriatrics
2251H1200X	Hand
2251H1300X	Human Factors
2251N0400X	Neurology
2251P0200X	Pediatrics
2251S0007X	Sports
2251X0800X	Orthopedic
Physician Assistant	
363A00000X	Physician Assistant, General
363AM0700X	Physician Assistant, Medical
363AS0400X	Physician Assistant, Surgical
367H00000X	Anesthesiology Assistant
Podiatry	
213E00000X	Podiatrist
213EG0000X	General Practice
213EP0504X	Public Medicine
213EP1101X	Primary Podiatric Medicine
213ER0200X	Radiology
213ES0000X	Sports Medicine
213ES0103X	Foot & Ankle Surgery
213ES0131X	Foot Surgery
Psychologist, Clinical	
103T00000X	Psychologist, General
103TA0400X	Addiction (Substance Abuse Disorder)
103TA0700X	Adult Development & Aging
103TB0200X	Cognitive & Behavioral
103TC0700X	Clinical
103TC0700X	Psychologist, Clinical, non-specific
103TC1900X	Counseling
103TC2200X	Clinical Child & Adolescent
103TE1000X	Educational
103TE1100X	Exercise & Sports
103TF0000X	Family
103TF0200X	Forensic
103TH0004X	Health
103TH0100X	Health Service
103TM1700X	Men & Masculinity

Taxonomy Code	Non-Physician Specialty
103TM1800X	Mental Retardation & Developmental Disabilities
103TP0016X	Prescribing (Medical)
103TP0814X	Psychoanalysis
103TP2700X	Psychotherapy
103TP2701X	Group Psychotherapy
103TR0400X	Rehabilitation
103TS0200X	School
103TW0100X	Women
Registered Dietitian or Nutrition Professional	
133V00000X	Dietician, Registered
133VN1004X	Dietician, Registered, Nutrition, Pediatric
133VN1005X	Dietician, Registered, Nutrition, Renal
133VN1006X	Dietician, Registered, Nutrition, Metabolic

Filters and Functionality

Physician Practice Type (PP) Filters (AMA, July 2018)

Physicians self-report their present practice type in the Masterfile. The filter options for present practice type are direct patient care, resident, administration, medical teaching, medical research, non-patient care, and no classification.

Physician Employment (PE) Filters (AMA, July 2018)

Physicians self-report their type of present employment in the Masterfile. The filter options for present employment are self-employed solo practice, two physician practice – full or part owner, other – patient care, locum tenens, group practice, HMO, medical school, non-government hospital, city/county/state government hospital, city/county/state other than hospital, federal government-hospital army, federal government-hospital navy, federal government-hospital air force, federal government-hospital (U.S. Public Health Service), veterans affairs, other federal agency, other-non-patient care, and no classification. Over 200,000 physicians were designated as having “no classification” in the July 2018 Masterfile.

Population per Provider Filter (AMA, July 2018, and/or CMS NPPES May 2018; 2010 U.S. Census)

This filter displays the ratio of state or county population as reported by the 2010 U.S. Census divided by number of healthcare providers in the selected categories within the state or county.

Information Card and Data Table

Population 2010 (2010 U.S. Census)

State or county population.

Population Density (per sq. mi) (2010 U.S. Census, prepared by Esri)

State or county population divided by area of state or county in square miles.

Percent Population over 65 (2010 U.S. Census, prepared by HealthLandscape)

Percentage of state or county population age 65 or older.

Percent Population under 18 (2010 U.S. Census, prepared by HealthLandscape)

Percentage of state or county population age 18 or younger.

Total Providers (AMA Masterfile, July 2018, and/or CMS NPPES, May 2018, geocoded for the best available practice address and prepared by HealthLandscape)

Total number of providers for all physician and non-physician specialties selected at the state or county level.

Population per Provider Ratio (AMA Masterfile, July 2018, and/or CMS NPPES, May 2018; 2010 U.S. Census, prepared by HealthLandscape)

Ratio of total number of providers for all physician and non-physician specialty selections within a state or county to state or county population as reported by the 2010 U.S. Census.

Population Health Explorer

Population health data increasingly are being recognized as vital information to personal health. Neighborhood, socioeconomic, and demographic characteristics play significant roles in influencing health outcomes. The Population Health Explorer has been added to the Health Workforce Mapper to help provide context to the communities in which healthcare providers work.

The Population Health Explorer allows the user to do cold-spot analysis using potential indicators of health status to find expected high-need areas based on data for the total population. The user can add an indicator by checking its checkbox. As the user moves the circles on the slider, only those geographies with a rate between the two settings on the slider will remain colored. When more than one indicator is turned on, areas with darker colors have more indicators within the specified threshold values.

The list of indicators and data come from the Robert Wood Johnson Foundation County Health Rankings project. The Population Health Explorer includes most of the County Health Rankings data.

Data sources used by Robert Wood Johnson County Health Rankings for all indicators are listed below.

Indicator	Source	National Benchmark
Health Behaviors		
Excessive Drinking	Behavioral Risk Factor Surveillance System, 2016	17.4% (Median)
Alcohol-Impaired Driving Deaths	Fatality Analysis Reporting System, 2012-2016	28.6% (Median)
Drug Overdose Deaths	CDC WONDER mortality data, 2014-2016	17.6 (Age-Adjusted rate per 100k)
Motor Vehicle Crash Deaths	CDC WONDER mortality data, 2013-2015	17.1 (Median)
Adult Obesity	CDC Diabetes Interactive Atlas, 2014	31.8% (Median)
Food Environment Index	USDA Food Environment Atlas, Map the Meal Gap, 2015	7.6 (Median)
Physical Inactivity	CDC Diabetes Interactive Atlas, 2014	26.8% (Median)
Access to Exercise Opportunities	Business Analyst, Delorme map data, Esri, U.S. Census TIGER/Line files, 2010, 2016	66.2% (Median)
Food Insecurity	Map the Meal Gap, 2015	13.6 (National Average)
Limited Access to Healthy Foods	USDA Food Environment Atlas, 2015	6.5 (Median)
Sexually Transmitted Infection Rate per 100,000	National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention, 2015	91 (Median)
Teen Births per 1,000 female population	National Center for Health Statistics, 2010-2016	31.8 (Median)
Adult Smoking	Behavioral Risk Factor Surveillance System, 2016	17.3% (Median)
Insufficient Sleep	Behavioral Risk Factor Surveillance System, 2016	32.9% (Crude Prevalence)

Indicator	Source	National Benchmark
Health Outcomes		
Poor or Fair Health	Behavioral Risk Factor Surveillance System, 2016	16.7% (Median)
Low Birthweight	National Center for Health Statistics, 2010-2016	7.7% (Median)
Clinical Care		
Uninsured	Small Area Health Insurance Estimates, 2015	11.5% (Median)
Primary Care Physicians per 100,000 pop	Area Health Resource File/American Medical Association, 2015	
Dentists per 100,000 pop	Area Health Resource File/National Provider Identification file, 2016	
Mental Health Providers per 100,000 pop	CMS, National Provider Identification file, 2017	
Uninsured Adults	Small Area Health Insurance Estimates, 2015	13.6% (Estimate)
Uninsured Children	Small Area Health Insurance Estimates, 2015	5.6% (Estimate)
Health Care Costs (USD)	Dartmouth Atlas of Health Care, 2015	9602.6 (U.S. Overall)
Other Primary Care Providers per 100,000 pop	CMS, National Provider Identification file, 2017	
Preventable Hospital Stays per 1,000 Medicare enrollees	Dartmouth Atlas of Health Care, 2015	55.9 (Median)
Diabetes Monitoring	Dartmouth Atlas of Health Care, 2014	85.8% (Median)
Mammography Screening	Dartmouth Atlas of Health Care, 2014	60.8% (Median)
Firearm Fatalities	CDC WONDER mortality data, 2012-2016	13.9 (Median)
Violent Crime Rate per 100,000	Uniform Crime Reporting - FBI, 2012-2014	187.2 (Median)
Injury Deaths per 100,000	CDC WONDER mortality data, 2012-2016	78.8 (Median)
Homicides	CDC WONDER mortality data, 2010-2016	4.9 (Median)
Social & Economic Factors		
High School Graduation	EDFacts, 2014-2015	87.5% (Median)
Some College	American Community Survey, 2012-2016	57.1% (Median)
Disconnected Youth	Measure of America, 2010-2014	17.4 (Median)
Unemployment	Bureau of Labor Statistics, 2016	5% (Median)
Children in Single-Parent Households	American Community Survey, 2012-2016	31.8% (Median)
Social Associations per 10,000	County Business Patterns, 2015	12.5 (Median)
Residential Segregation - Black/White	American Community Survey, 2012-2016	46.3 (Median)
Residential Segregation - Non-White/White	American Community Survey, 2012-2016	30.5 (Median)
Children in Poverty	Small Area Income and Poverty Estimates, 2016	21.3% (Median)

Indicator	Source	National Benchmark
Income Inequality	American Community Survey, 2012-2016	4.4 (Median)
Median Household Income (USD)	Small Area Income and Poverty Estimates, 2016	\$47,589 (Estimate)
Free or Reduced-Price Lunch	National Center for Education Statistics, 2015-2016	53.2% (Median)
Physical Environment		
Air Pollution-Particulate Matter micrograms per cubic meter	Environmental Public Health Tracking Network, 2012	9.2 (Median)
Severe Housing Problems	Comprehensive Housing Affordability Strategy (CHAS) data, 2010-2014	14% (Median)
Driving Alone to Work	American Community Survey, 2012-2016	80.2% (Median)
Long Commute-Driving Alone	American Community Survey, 2012-2016	30.1% (Median)

Optional Layers

U.S. & Census Geographic Boundaries

States (Data from Esri)

This layer displays U.S. state boundaries.

Counties (Data from Esri)

This layer displays county and county equivalent boundaries in the 50 states, the District of Columbia, and Puerto Rico.

ZIP Code Tabulation Areas (2010) (Data from U.S Census)

This layer displays ZIP Code Tabulation Areas (ZCTAs), which are generalized representations of U.S. Postal Service ZIP Codes. Currently, each ZCTA is built by aggregating Census 2010 blocks, whose addresses use a given ZIP Code, into a ZCTA which gets that ZIP Code assigned as its ZCTA code. While in most instances the ZCTA code equals the ZIP Code for an area, not all ZIP Codes have their own ZCTA. For more information, see: <https://www.census.gov/geo/reference/zctas.html>.

Census Tracts (2010) (Data from Esri)

This layer displays census tracts as defined by the 2010 U.S. Census in the 50 states, the District of Columbia, and Puerto Rico. Census tracts are small statistical subdivisions of a county defined for Census data collection.

Block Groups (2010) (Data from Esri)

This layer displays census block groups as defined by the 2010 U.S. Census in the 50 states, the District of Columbia, and Puerto Rico. Block groups are clusters of blocks within census tracts.

Health Policy

116th Congressional Districts (Data from Esri and updated every two years)

This layer displays United States House of Representatives district boundaries for the 116th Congress (2019-2020).

Primary Care HPSAs (Data from HRSA Data Warehouse, updated quarterly)

This layer displays primary medical care Health Professional Shortage Areas (HPSAs), designated as having a shortage of primary medical care. They may be urban or rural areas, population groups, or medical or other public facilities. For more information, see: <https://bhw.hrsa.gov/shortage-designation/hpsas>

Dental Care HPSAs (Data from HRSA Data Warehouse, updated quarterly)

This layer displays dental care Health Professional Shortage Areas (HPSAs), designated as having a shortage of dental care. They may be urban or rural areas, population groups, or medical or other public facilities. For more information, see: <https://bhw.hrsa.gov/shortage-designation/hpsas>

Mental Health Care HPSAs (Data from HRSA Data Warehouse, updated quarterly)

This layer displays mental health care Health Professional Shortage Areas (HPSAs), designated as having a shortage of mental health care. They may be urban or rural areas, population groups, or medical or other public facilities. For more information, see: <https://bhwh.hrsa.gov/shortage-designation/hpsas>

Medically Underserved Areas/Populations (Data from HRSA Data Warehouse, updated quarterly)

This layer displays Medically Underserved Areas/Populations (MUA/Ps), which may be a whole county or a group of contiguous counties, a group of county or minor civil divisions, a group of urban census tracts in which residents have a shortage of personal health services, or Exceptional/Governor designated. Medically Underserved Populations (MUPs) may include groups of persons who face economic, cultural or linguistic barriers to health care. For more information, see: <https://bhwh.hrsa.gov/shortage-designation/muap>

Health Care Facilities

Hospitals (Data from CMS, processed and geocoded by, downloaded from, the HRSA Data Warehouse, updated quarterly)

This layer displays the location of all U.S. hospitals.

Health Center Program Delivery Sites (Data from HRSA Data Warehouse, updated quarterly)

This layer displays the locations of service access points/sites of the diverse public and non-profit organizations and programs that are Health Center Program (HCP) awardees. HCP awardees receive federal funding under Section 330 of the Public Health Service (PHS) Act, as amended by the Health Centers Consolidated Act of 1996 (P.L. 104-299) and the Safety Net Amendments of 2002. HCP awardee reported service access points/sites include Community Health Centers, Migrant Health Centers, Health Care for the Homeless Health Centers, and Primary Care Public Housing Health Centers.

Rural Health Clinics (Data from CMS, processed and geocoded by, downloaded from, the HRSA Data Warehouse, updated quarterly)

This layer displays the location of all active Rural Health Clinics, as defined by Title XVIII, Section 1861(aa) of the Social Security Act, regardless of whether they receive facility or point HPSA (health professional shortage area) designation. For more information, see: <https://www.ruralhealthinfo.org/topics/rural-health-clinics>

VHA Facilities (Data from VA, processed and geocoded by, downloaded from, the HRSA Data Warehouse, updated quarterly)

Displays the location of all Veterans Health by type (Health Care Center, VA Medical Center, Primary Care Community-based Outpatient Clinic, Multi-Specialty Community-Based Outpatient Clinic, and Other VHA Facility).

Infrastructure

Interstates (Data from ESRI ArcGIS 10.1 Data and Maps for ArcGIS Server)